

CLAIM AMENDMENTS

IN THE CLAIMS

This listing of the claims will replace all prior versions, and listing, of elaims in the application or previous response to office action:

1. **(Currently Amended)** A valve body comprising a cartridge with a reeess that forms an injection nozzle on one end and a needle that is arranged in the recess and closes the injection nozzle if it rests with its seat area on a needle seat of the cartridge, wherein an area of the cartridge adjacent to the needle seat has an inner diameter contour and a cylindrically-shaped outer diameter contour, and the needle has a cylindrically-shaped area adjacent to the seat area, and wherein the cylindrically-shaped outer diameter contour of the cartridge adjacent to the needle seat and the cylindrically-shaped area of the needle have the same outer diameter.
2. (Previously Presented) A valve body according to claim 1, wherein the needle seat and the seat area of the needle are conically shaped.
3. (Previously Presented) A valve body according to claim 1, wherein the cartridge has an area adjacent to the area adjacent to the needle seat wherein the outer diameter of the cartridge is increasing in the direction away from the injection nozzle.
4. (Previously Presented) A fluid injector with a housing, an actuator unit and a valve body according to Claim 1.

5. (Withdrawn) A method for manufacturing a valve body with a cartridge with a recess that forms on one end an injection nozzle, and with a needle that is arranged in the recess and closes the injection nozzle if it rests with its seat area on a needle seat of the cartridge, wherein the area of the cartridge adjacent to the needle seat has a cylindrically-shaped outer contour and the needle has cylindrically-shaped area adjacent to the seat area with the following steps:

- inserting the needle in the recess and bringing it to rest with its seat area on the needle seat,
- grinding the cylindrically-shaped outer contour of the cartridge and the cylindrically-shaped area of the needle together.

6. (Withdrawn) A method for manufacturing a valve body according to claim 5, wherein the grinding includes a honing process.

7. (Withdrawn) A method for manufacturing a valve body according to claim 5, wherein the grinding includes a lapping process.

8. **(Currently Amended)** A valve body comprising:
a injection nozzle comprising a recess, and
a needle arranged within the recess and being operable to close the injection nozzle when resting with its seat area on a needle seat of the injection nozzle, wherein
an area of the injection nozzle adjacent to the needle seat has an inner diameter contour and a cylindrically-shaped outer diameter contour, and the needle has a cylindrically-shaped area adjacent to the seat area, and wherein the cylindrically-shaped outer diameter contour of the injection nozzle adjacent to the needle seat and the cylindrically-shaped area of the needle have the same outer diameter.

9. (Previously Presented) A valve body according to claim 8, wherein the needle seat and the seat area of the needle are conically shaped.

10. (Previously Presented) A valve body according to claim 8, wherein the injection nozzle comprises an area adjacent to the area adjacent to the needle seat wherein the outer diameter of the injection nozzle is increasing in the direction away from the injection nozzle.

11. (Previously Presented) A fluid injector with a housing, an actuator unit and a valve body according to Claim 8.